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Need of a Digital Library for Indian Theses and Dissertations: A model on par with the ETD initiatives at International Level

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ABSTRACT

In India, a strong move to digitize the internal sources of libraries in universities and other academic institutions yet to take place, which have a rich, precious and unique sources of information is hidden, even unlocked, like theses and dissertations. The idea of E- Theses and Dissertations (ETD) is coming up in International scenario, which can be easily located, readily accessible and delivered over the web. INFLIBNET as the only agency to take care the automation of academic libraries, established by UGC, has to further the existing achievements and to play a role in creating digital library of theses and dissertation to start with. In this paper the works done by INFLIBNET so far in this direction are cited with a proposal for a digital library of Indian theses and dissertations.

1. Introduction

Most of the Indian academic libraries are in the way of their automation by creating database, providing services through different library management software, making available of OPAC, where some of them went ahead by going totally online. Research and development on digital libraries is at a very preliminary stage in India, even though all of them procured or subscribed to externally published digital collections in CD/DVD formats and online. A strong move to digitize the internal sources of libraries in universities and other academic institutions yet to take place, which have a rich, precious and unique sources of information is hidden, even unlocked. Nevertheless, the country's own resources cannot be accessed and utilized unless digital libraries of such resources are built and maintained. There are several areas where such digital libraries can be built; the first and foremost should be to build a digital library of theses and dissertations. INFLIBNET is an excellent position to spearhead in building such digital

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libraries [1]. In this paper we are trying to spell out the works done by INFLIBNET so far in this direction and a proposal for a digital library of Indian theses.

2. Why Theses?

Indian universities play a major role in generation and dissemination of knowledge by conducting research works and producing Ph D theses as a unique genre of information sources. Every year, nearly 8000-10000 Ph Ds are awarded in India. The purpose of the thesis is to provide an experience in scholarship, which will be of enduring value to the student in understanding how new knowledge is acquired and communicated within the chosen field. These works contain valuable content, including focused literature reviews and details on research, which are not generally made available elsewhere. At present there are some lacunas in publication, control and access theses information in India, and some attempts have been made to address them. At the moment, most unpublished theses are hard to get hold of, as they are filed only in the university library where the student has worked. The Indian thesis literature is beset with many problems like Lack of Systematic acquisition, Lack of Access, Uncertain publication practice, Enormous Growth in the number of theses etc [2]. In western countries, these problems were addressed already and serious attempts have been made to solve them. In North America, less than 5% of all accepted dissertations and masters' theses are initially conceived of and executed as electronic documents. The vast majority is intended as paper documents and takes their final form as paper documents. The extent of electronic publishing in developing countries would be even less [3]

3. Why INFLIBNET?

INFLIBNET, as the national level library network engages in development of national union databases and already hosted an online database of Indian theses. This database provides bibliographical details of around 1,37,000 Ph D theses or Doctoral Dissertations awarded by all Indian Universities. It can be accessed via Internet from our website <http://www.inflibnet.ac.in> (see Figure 1). This development has initiated in 1994 and covers all subject areas contributed by around 200 universities/institutions from all over India. Access to this unique online source of information highlights the intellectual contribution of the universities in the country, gives trends in research in each area, gives trends in productivity of Indian researchers, helps in determining one's research area,

avoids duplication in research work, facilitates Inter-Library Loan wherever possible and promotes resource sharing. This online database has the provision to search from the following access points as Title, Researcher, Guide(s), Department, University, Place,

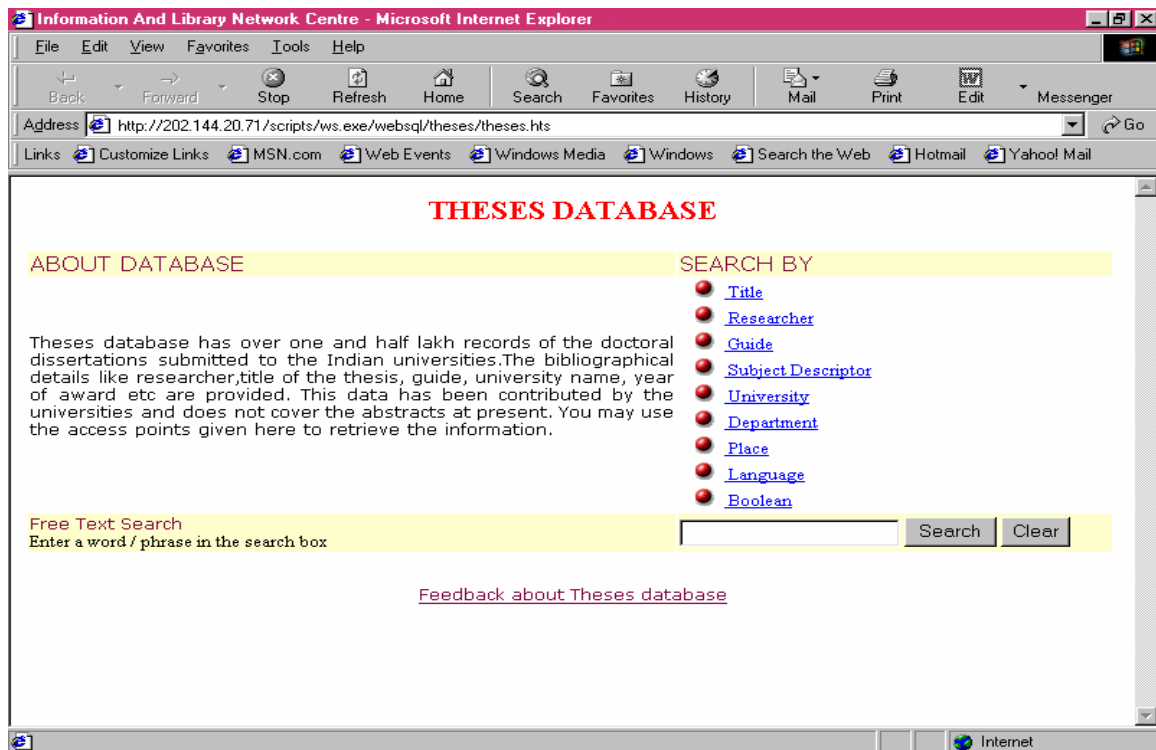


Figure 1

Year of award, Subject(s), Free Text and Boolean Search [See annexures]. The major limitations of this database are the lack of 100-percentage coverage in terms of the total number of Ph Ds awarded in India, the unavailability of abstracts and multi-lingual problems. Keeping these limitations as well as the tremendous opportunities emerged out of developments in IT and digital technologies in mind, INFLIBNET has to initiate new projects for furthering the existing achievements. Taking in to account all efforts made so far in this direction, INFLIBNET is the right organization to build national digital library of theses and dissertation to start with, and for other resources later.

4. ETDs: a new genre?

We are going through an e-yuga, where everything is available or supposed to be available in e-format. Information professionals are very much aware about e-mail, e-journal, e-book, e-commerce, e-education, e-learning etc. ETDs (electronic theses or

dissertations) are a new genre of documents, continuously re-defined as technology and student knowledge evolves. “An ETD is a document that explains the research or scholarship of a researcher/student. It is expressed in a form simultaneously suitable for machine archives and worldwide retrieval. The ETD is similar to its paper predecessor. It has figures, tables, footnotes, and references. It has a title page with the authors' name, the official name of the university, the degree sought, and the names of the committee members. It documents the author's years of academic commitment. It describes why the work was done, how the research relates to previous work as recorded in the literature, the research methods used, the results, and the interpretation and discussion of the results, and a summary with conclusions. The ETD is different, however. It provides a technologically advanced medium for expressing your ideas” [4]. ETDs evolved with Digital Libraries and many academic institutions in the world treat it as an important component of their Digital Libraries.

4.1 Need for ETDs?

There are many reasons for having ETDs [4].

- Almost all TDs are produced as electronic documents, and if researchers know in advance about how to prepare ETDs, then creating their own ETD usually is a very simple process.
- Minimize duplication of effort
- Improve visibility
- Accelerate workflow: graduate more quickly, make ETDs available faster to outside audience
- Costs and benefits
- Enhancing access to university research
- Helping universities develop digital library services & infrastructure
- Increasing sharing and collaboration among universities and students

More than that, ETDs enhance the availability of research and creative work done by researchers and increase the visibility of research and creative activities undertaken at our universities. Electronic archiving would likely make access to dissertations and theses easier, more rapid, and more economical, that digital dissertations require less space to store than paper documents, and that digital dissertations have portability advantages and

may be more environmentally friendly than paper documents. Literature search [6-16] on ETD projects reveals that there are lot of projects are undergoing and experimenting at international level (*See Annexure*).

5. Proposal for Indian ETDs

The theses submitted to Universities in support of Ph.D degree are difficult to access, as they are stocked only in the university library where the student has worked. In contrast to this, the idea of E- Theses and Dissertations (ETD) is coming up in International scenario, which can be easily located, readily accessible and delivered over the web. In India also, most researchers already write their theses in electronic format using standard word-processing and desktop publishing and graphics software. Changing the means for submitting theses from paper to electronic format will result in a more efficient and less costly process for the researcher in terms of the cost and time involved in making multiple paperbound copies.

5.1 Making of ETDs

A digital library for Indian Doctoral Theses can have two parallel components, such as directly hosting theses as submitted in e-format under normal University submission process, and the digitization of a selected number of frequently requested existing theses in print form. Less used theses can be covered by giving an informative abstract. The full text theses can be in SGML/HTML/PDF format, where PDF is accepted worldwide for this purpose. Creation of metadata for search purpose and search engine for accessing the full text has to be developed. Only valuable research works have to be published here by reviewing each Ph D theses by an expert committee from each filed. Other Ph Ds can be accessible by providing only informative abstracts

5.2 Role of INFLIBNET

INFLIBNET theses database already contains sufficient search fields and search engine has developed to access this database. Full text of theses can be hosted in individual universities so that a federated search has to be developed, or can be hosted in INFLIBNET Website for wider access. NISSAT has funded a project for Mysore University Library for creating a digital library of their theses collection [5]. INFLIBNET, as the only one agency in India to deal with University library automation,

has to take more initiative in this regard in collaboration with other agencies interested in this area.

5.3 Role of UGC

University Grants Commission, as the apex body dealt with Indian universities, can release sufficient funds for launching this project. Hence this as a digital library can be the most important component of the Indian academic and research information gateway and the proposed network called as UGCNET. Role of UGC will fall in guiding Universities for submitting the Theses electronically, preparation of guidelines and standards for preparing and submitting ETDs, making awareness Indian academia about the vast opportunities in e-publishing etc.

Conclusion

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Annexure: Selected ETD projects and resources worldwide

1. DISSERTATIONANDTHESES.COM
<http://www.dissertationsandtheses.com/>
2. NETWORKED DIGITAL LIBRARY OF THESES AND DISSERTATIONS (NDLTD)
For search/Browse the Digital Library - <http://www.theses.org/>
3. THESENET (FRANCE)
<http://thesenet.abes.fr/>
4. ELECTRONIC THESES AND DISSERTATIONS AT N C STATE UNIVERSITY LIBRARIES
<http://www.lib.ncsu.edu/etd/>
5. AUSTRALIAN DIGITAL THESES PROGRAM
<http://adt.caul.edu.au/>
6. CONCORDIA UNIVERSITY, ILLINOIS ELECTRONIC THESIS AND DISSERTATION (ETD) COLLECTION
<http://www2.curf.edu/~crfetd/>
7. UNIVERSITY OF WATERLOO ELECTRONIC THESIS DATABASE
<http://www.lib.uwaterloo.ca/ETD/etheses.html>

8. THE PENNSYLVANIA STATE UNIVERSITY'S ELECTRONIC THESES AND DISSERTATIONS ARCHIVES
<http://www.etd.psu.edu/>
9. WEST VIRGINIA UNIVERSITY
<http://www.wvu.edu/~thesis/>

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